

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of attenuating a cancer inducing or maintaining an immune response in a mammal to a Group B β -hemolytic *Streptococci* (“GBS”) toxin receptor, comprising

administering to the mammal a composition comprising an amount of one or more of the GBS toxin receptor or the fragment thereof, the GBS toxin receptor or the fragment thereof capable of inducing or maintaining the immune response in the mammal to the GBS toxin receptor,

Group B β hemolytic *Streptococci* (“GBS”) toxin receptors having an amino acid sequence of HP59 or SP55 or an amino acid sequence of HP59 or SP55 GBS toxin receptors with at least one conservative amino acid substitution,

wherein the in an amount is effective to induce or maintain [[an]] the immune response in the mammal to the GBS toxin receptor receptor, at least one of the one or more Group B β -hemolytic *Streptococci* toxin receptors, and

wherein the GBS toxin receptor comprises SEQ ID NO:2, SEQ ID NO 4, conservatively substituted SEQ ID NO:2 having at least about 80% identity to SEQ ID NO:2, or conservatively substituted SEQ ID NO:4 having at least about 80% identity to SEQ ID NO:4.

wherein the cancer is a solid tumor cancer associated with pathological neovasculature.

- 2-3. (Canceled)

4. (Currently Amended) The method of claim 1, wherein the composition comprises at least one of the one or more Group B β -hemolytic *Streptococci* toxin receptors has an amino acid sequence of SEQ ID NO:2.

5. (Withdrawn; Currently Amended) The method of Claim 1, wherein ~~at least one of the one or more Group B β-hemolytic *Streptococci* toxin receptors has an amino acid sequence of the composition comprises~~ SEQ ID NO:2 with at least one conservative amino acid substitution.

6-7. (Cancelled)

8. (Withdrawn; Currently Amended) The method of claim 1, wherein ~~at least one of the one or more Group B β-hemolytic *Streptococci* toxin receptors has an amino acid sequence of the composition comprises~~ SEQ ID NO: 4.

9. (Withdrawn; Currently Amended) The method of claim 8, wherein ~~at least one other of the one or more Group B β-hemolytic *Streptococci* toxin receptors has an amino acid sequence of the composition comprises~~ SEQ ID NO: 2.

10. (Withdrawn; Currently Amended) The method of claim 1, wherein ~~at least one of the one or more Group B β-hemolytic *Streptococci* toxin receptors has an amino acid sequence of the composition comprises~~ SEQ ID NO: 4 with at least one conservative amino acid substitution.

11-14. (Cancelled) .

15. (Currently Amended) The method of claim 1, wherein a normal tissue of the mammal does not contain [[a]] the Group B β-hemolytic *Streptococci* toxin receptor.

16. (Previously Presented) The method of claim 1, wherein the composition is administered via a method selected from the group consisting of oral ingestion, nasal inhalation, subcutaneous injection, intravenous injection, intramuscular injection, intraperitoneal injection and rectal injection.

17-30. (Canceled)

31-58. (Canceled)

59. (Currently Amended) A method of inducing or maintaining an immune response attenuating a cancer in a mammal to a Group B β -hemolytic *Streptococci* ("GBS") toxin receptor, comprising

administering to the mammal a composition comprising an amount of an immunogenic ~~Group B β -hemolytic *Streptococci* GBS~~ toxin receptor peptide capable of inducing or maintaining the immune response in the mammal to the GBS toxin receptor and comprising one or more amino acid sequences selected from the group consisting of amino acid residues 49-63 of SEQ ID NO:2, amino acid residues 112-125 of SEQ ID NO:2, amino acid residues 8-28 of SEQ ID NO:2, amino acid residues 49-76 of SEQ ID NO:2, amino acid residues 14-19 of SEQ ID NO:4, amino acid residues 75-80 of SEQ ID NO:4, amino acid residues 25-30 of SEQ ID NO:4, amino acid residues 9-35 of SEQ ID NO:4, amino acid residues 8-22 of SEQ ID NO:4 and amino acid residues 71-84 of SEQ ID NO:4,

wherein the amount is effective to induce or maintain [[an]] the immune response in the mammal to [[a]] the GBS Group B β -hemolytic *Streptococci* toxin receptor, and

~~wherein the cancer is a solid tumor cancer associated with pathological neovasculature.~~

60. (Currently Amended) The method of claim 59, wherein a normal tissue of the mammal does not contain the GBS Group B β -hemolytic *Streptococci* toxin receptor.

61. (Previously Presented) The method of claim 59, wherein the composition is administered via a method selected from the group consisting of oral ingestion, nasal inhalation, subcutaneous injection, intravenous injection, intramuscular injection, intraperitoneal injection and rectal injection.

62. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 49-63 of SEQ ID NO: 2.

63. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 112-125 of SEQ ID NO: 2.

64. (Previously Presented) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 8-28 of SEQ ID NO: 2.

65. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 49-76 of SEQ ID NO: 2.

66. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 14-19 of SEQ ID NO: 4.

67. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 75-80 of SEQ ID NO: 4.

68. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 25-30 of SEQ ID NO: 4.

69. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 9-35 of SEQ ID NO: 4.

70. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 8-22 of SEQ ID NO: 4.

71. (Withdrawn) The method of claim 59, wherein the immunogenic Group B β -hemolytic *Streptococci* toxin receptor peptide comprises a sequence consisting of amino acid residues 71-84 of SEQ ID NO: 4.

72-88. (Cancelled)

89. (Previously Presented) The method of Claim 1, wherein the mammal has
~~cancer is~~ lung cancer or melanoma.

90. (Cancelled)

91. (Previously Presented) The method of Claim 59, wherein the mammal has
~~cancer is~~ lung cancer or melanoma.

92. (Cancelled)

93. (New) The method of Claim 1, wherein the mammal has a solid tumor cancer associated with pathological neovasculature.

94. (New) The method of Claim 59, wherein the mammal has a solid tumor cancer associated with pathological neovasculature.